

Figure 1  
System Architecture

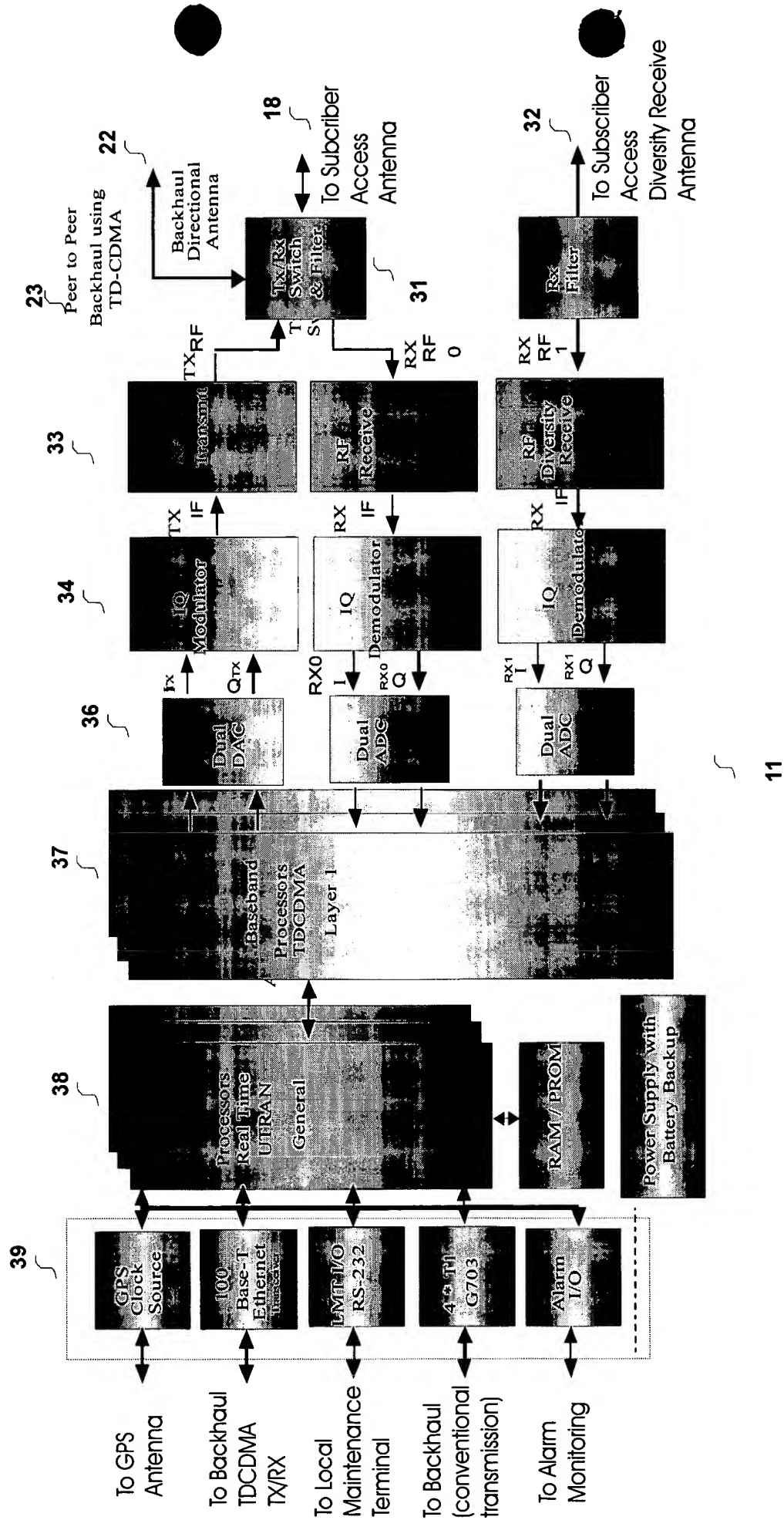


Figure 2  
Basestation (NodeB)

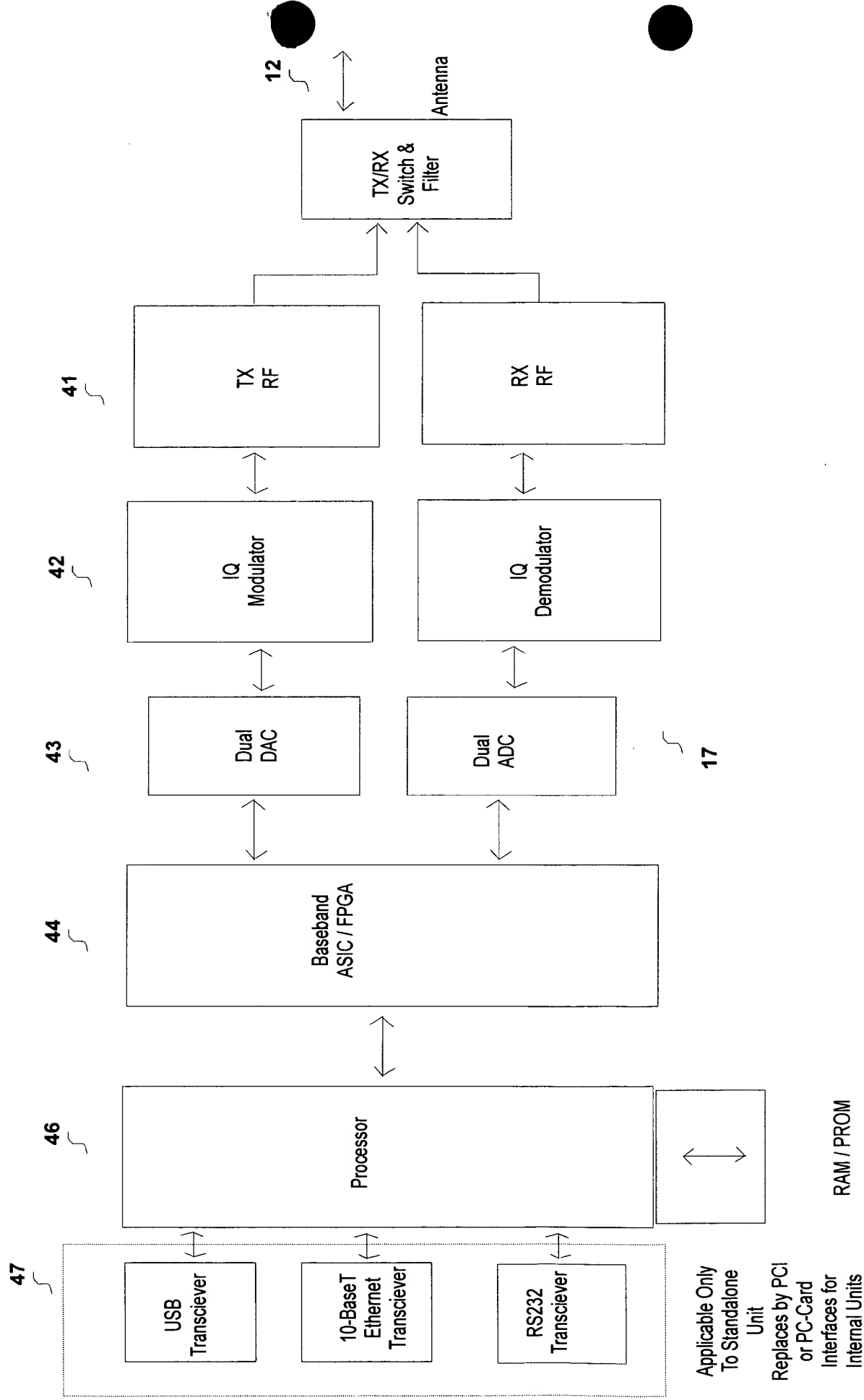
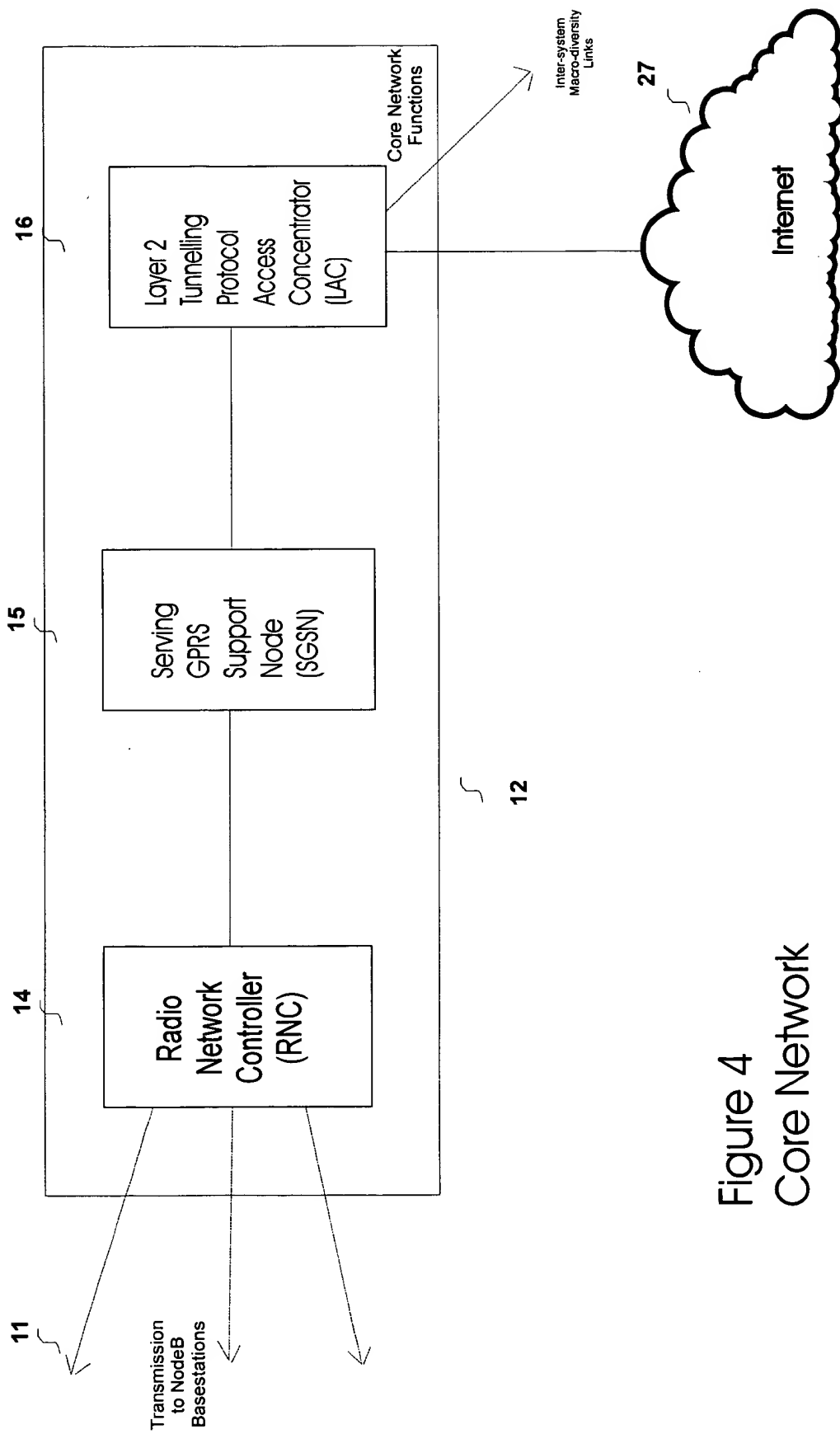
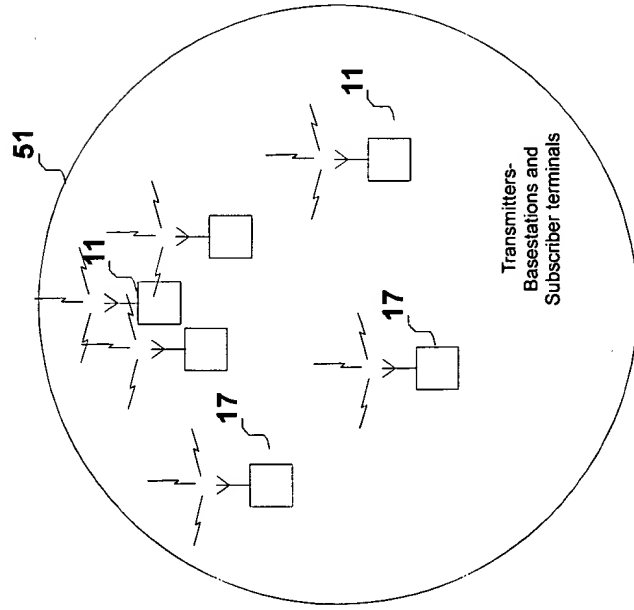
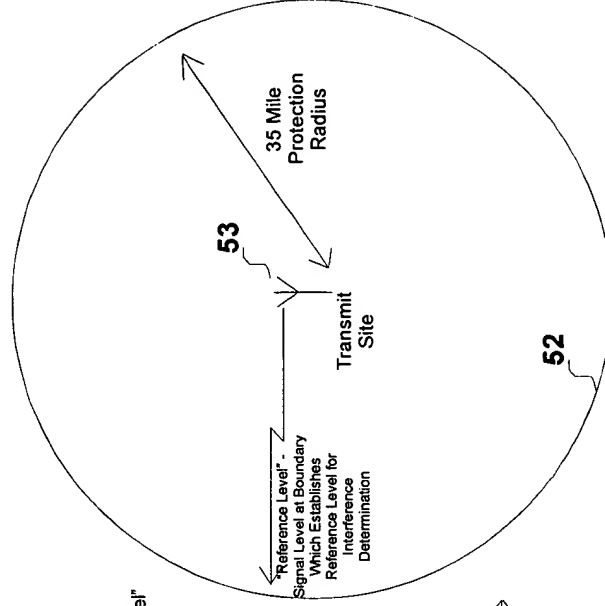


Figure 3  
User Equipment (UE)





Service Area



Adjoining Service Area  
(other operator)

54 Aggregate Signal Level No Greater Than -45 dB relative to "Reference Level" on co-channel (same channel as in adjoining service area)

55 Aggregate Signal Level No Greater Than 0 dB relative to the wanted signal on an adjacent channel either in the same service area on in adjacent service area (channel adjacent in frequency to that used by another licensee)

56 Absolute Aggregate Signal Level No Greater Than -73 dBW/m<sup>2</sup>

Figure 5  
FCC Interference Rules

Figure 6  
Interference Avoidance

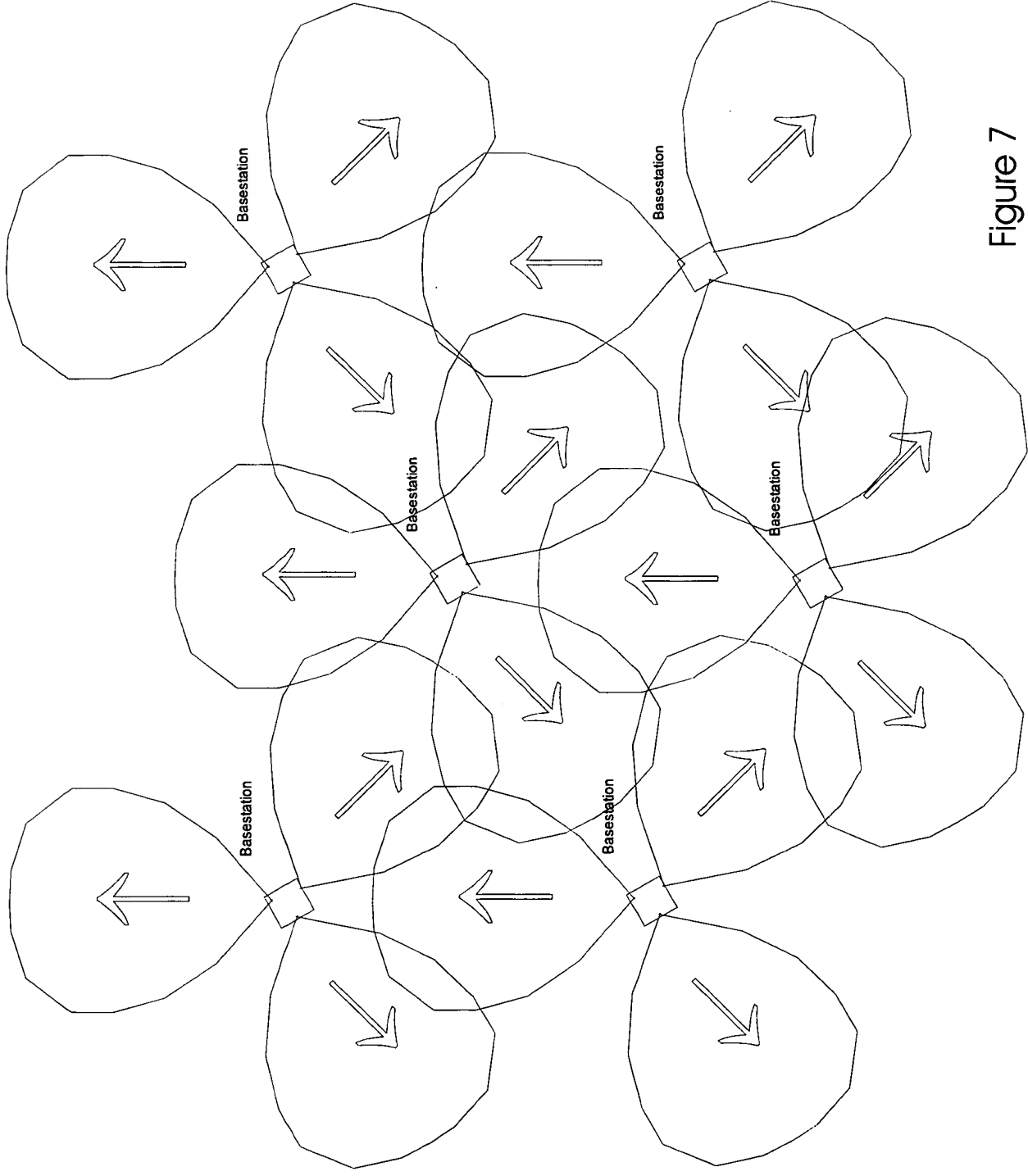


Figure 7  
Prior Art:- Typical Cellular  
Wireless Coverage Pattern

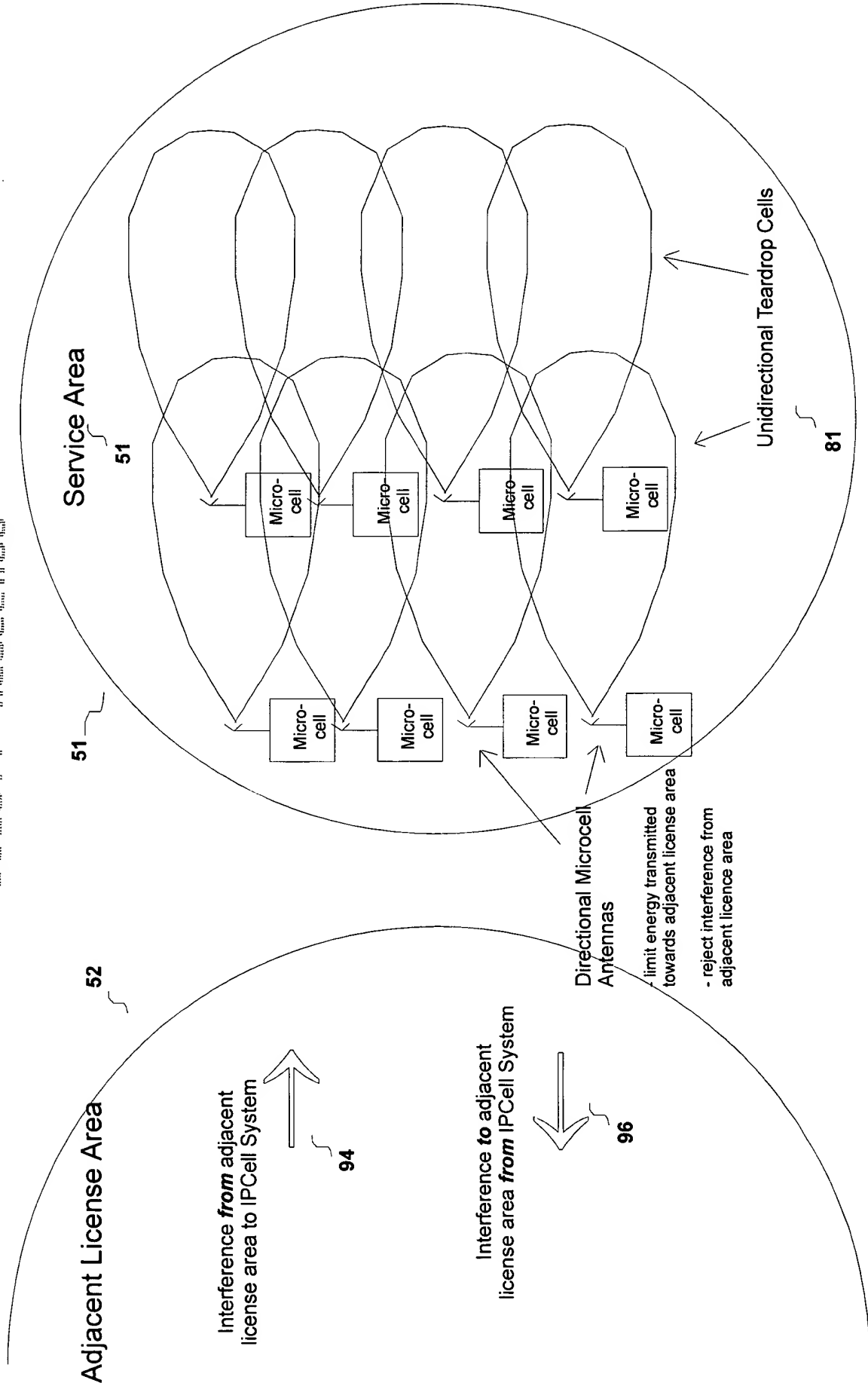


Figure 8  
Interference Reduction -  
Unidirectional Teardrop  
Cellular Wireless Coverage Pattern



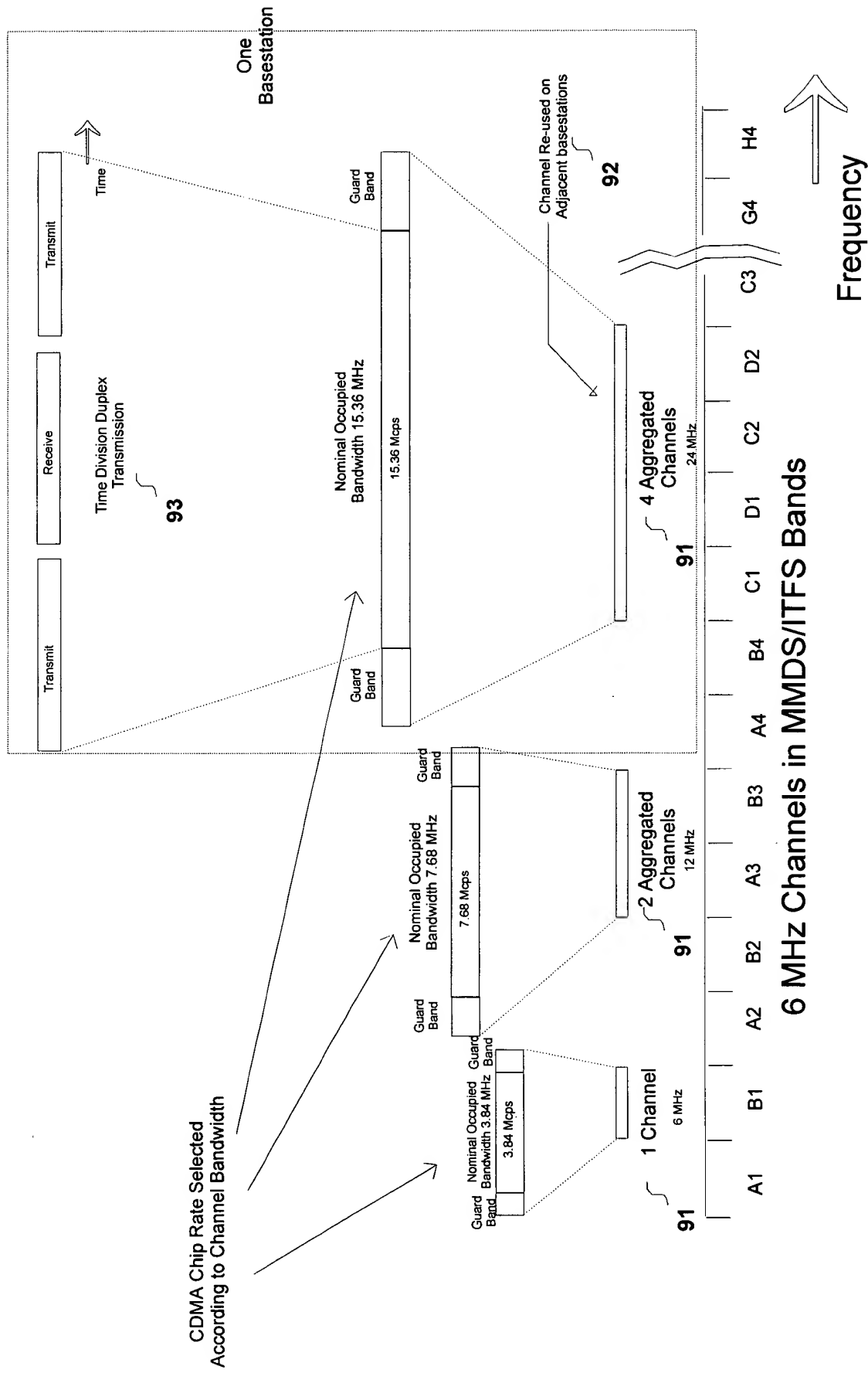


Figure 9  
RF Channel Utilization



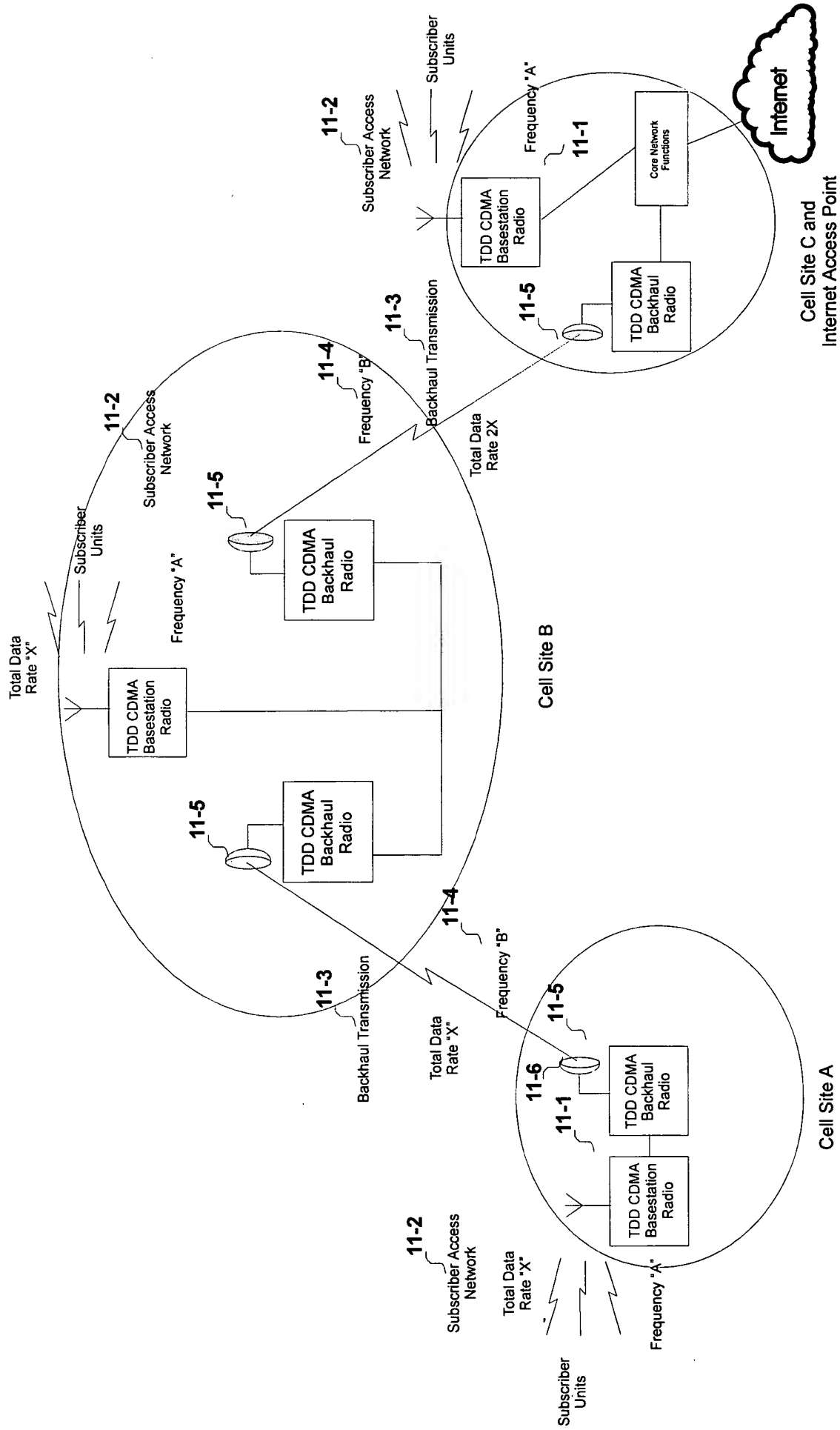


Figure 11  
CDMA Backhaul Transmission

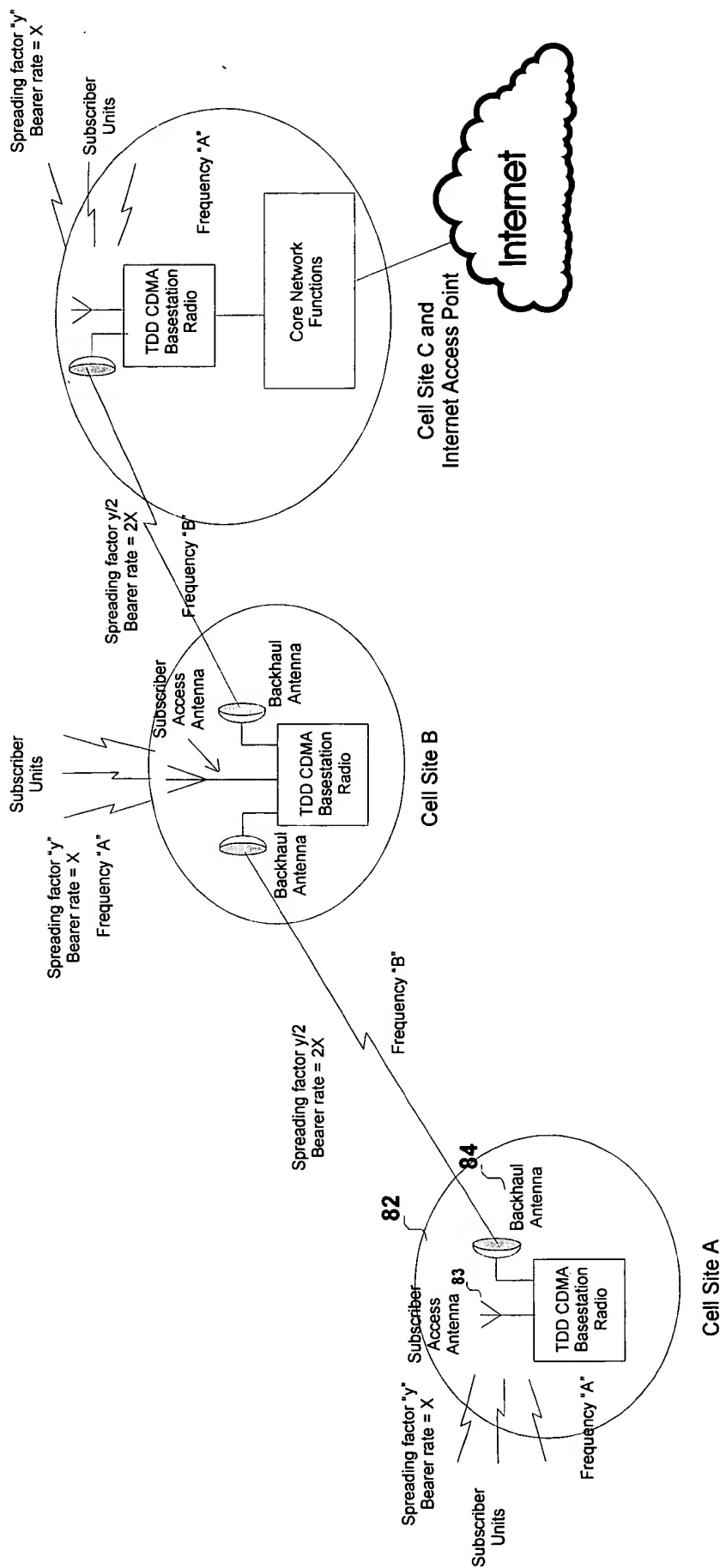


Figure 12  
Peer to Peer Backhaul Routing

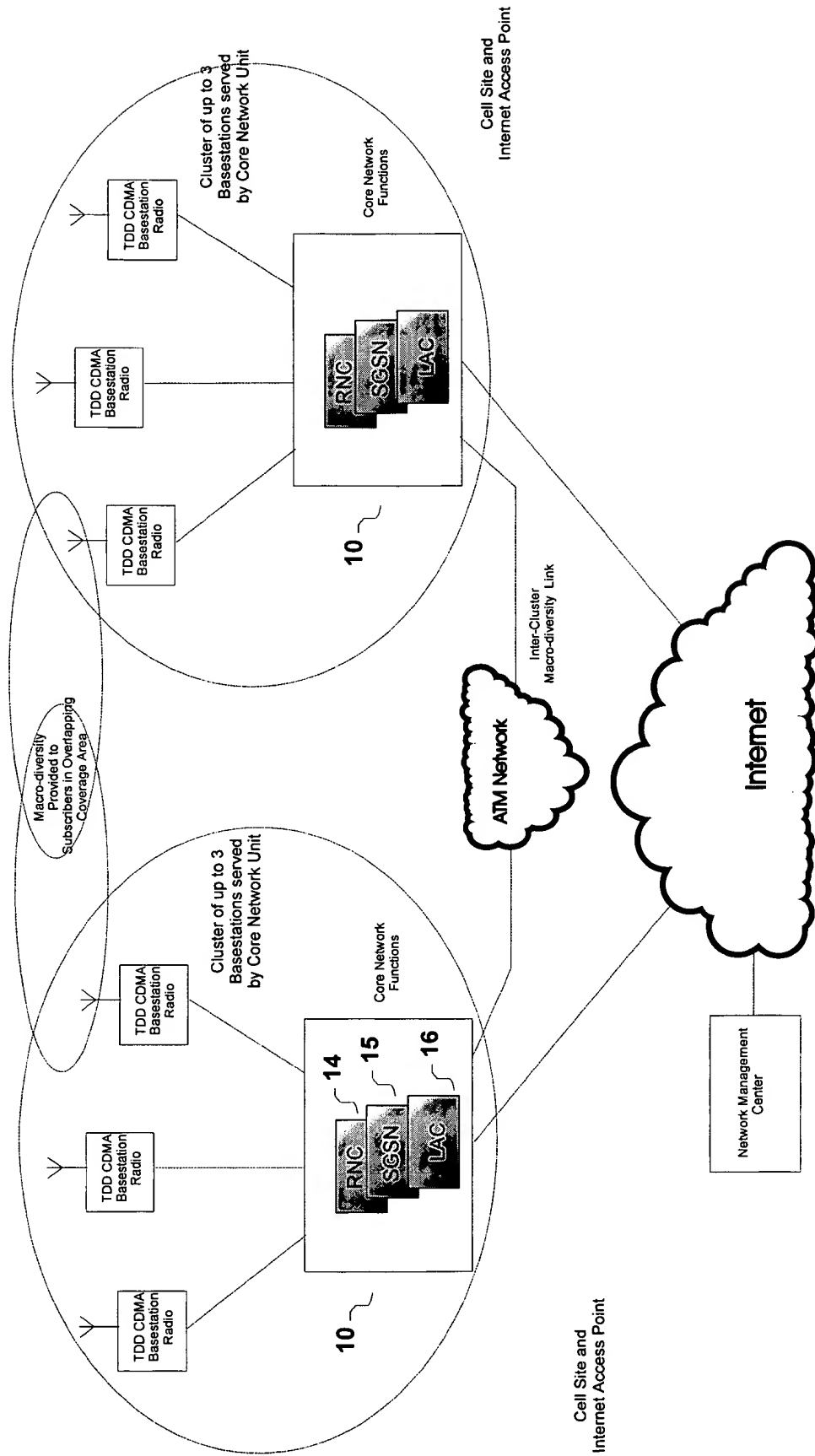
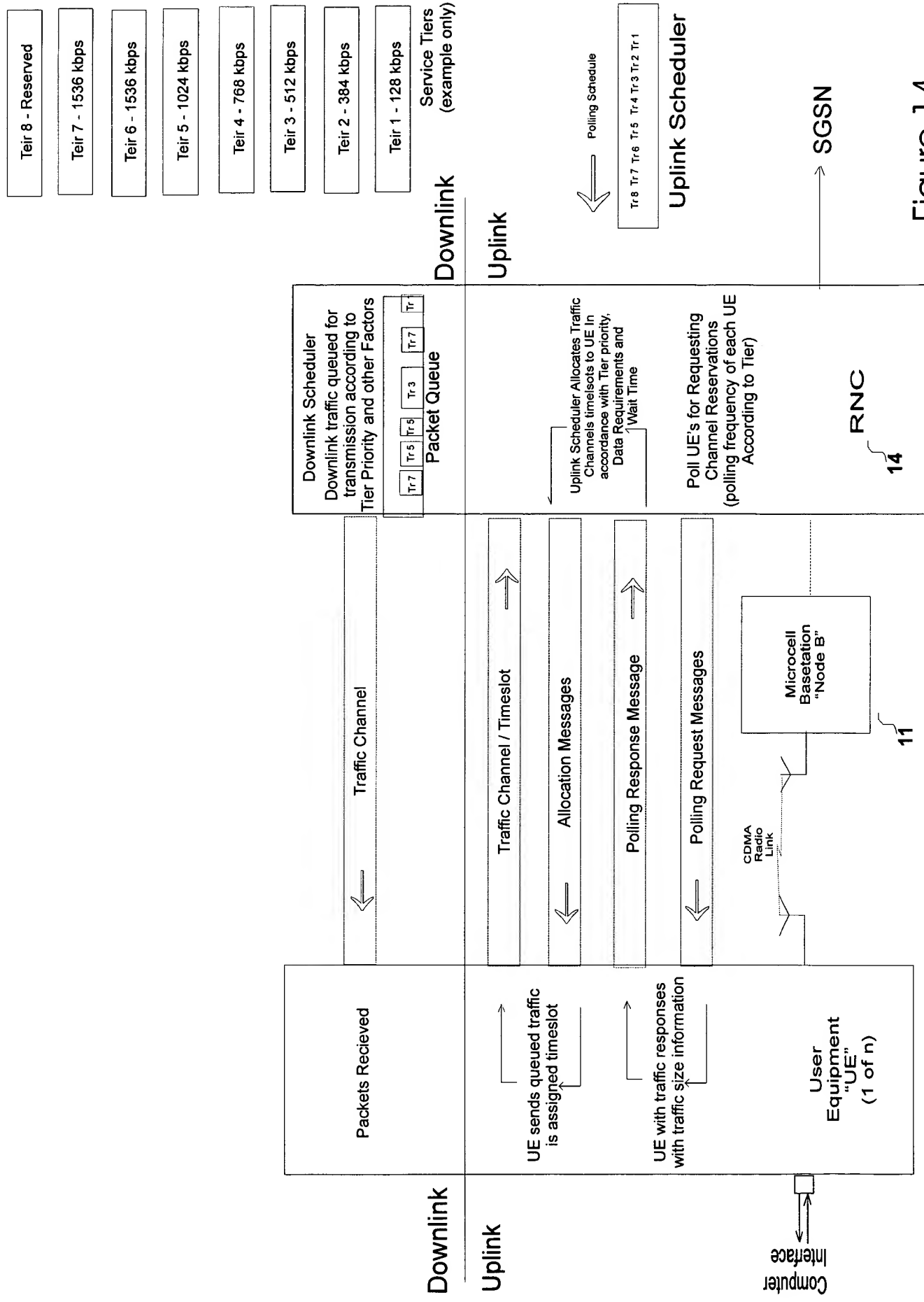


Figure 13  
Distributed Core Network Functions









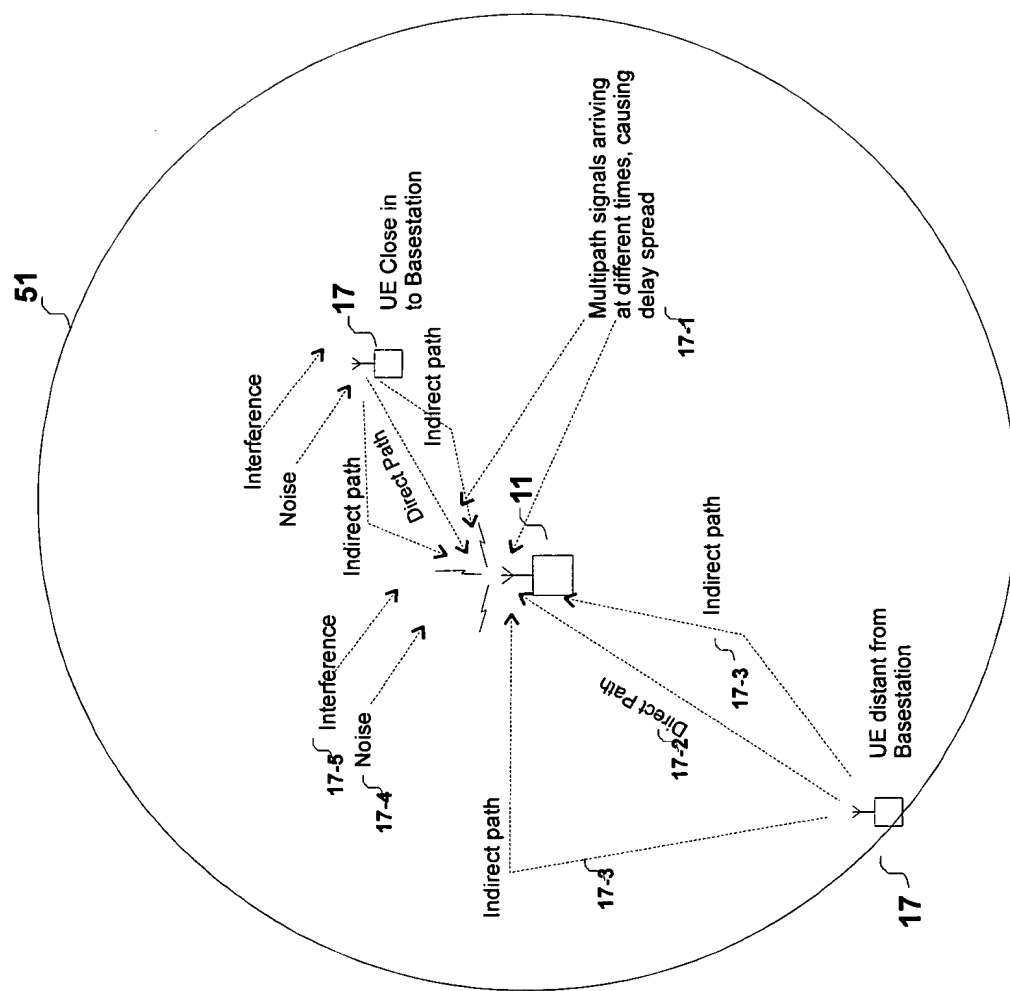


Figure 17  
Transmission Rate Adaption  
Channel Measurement

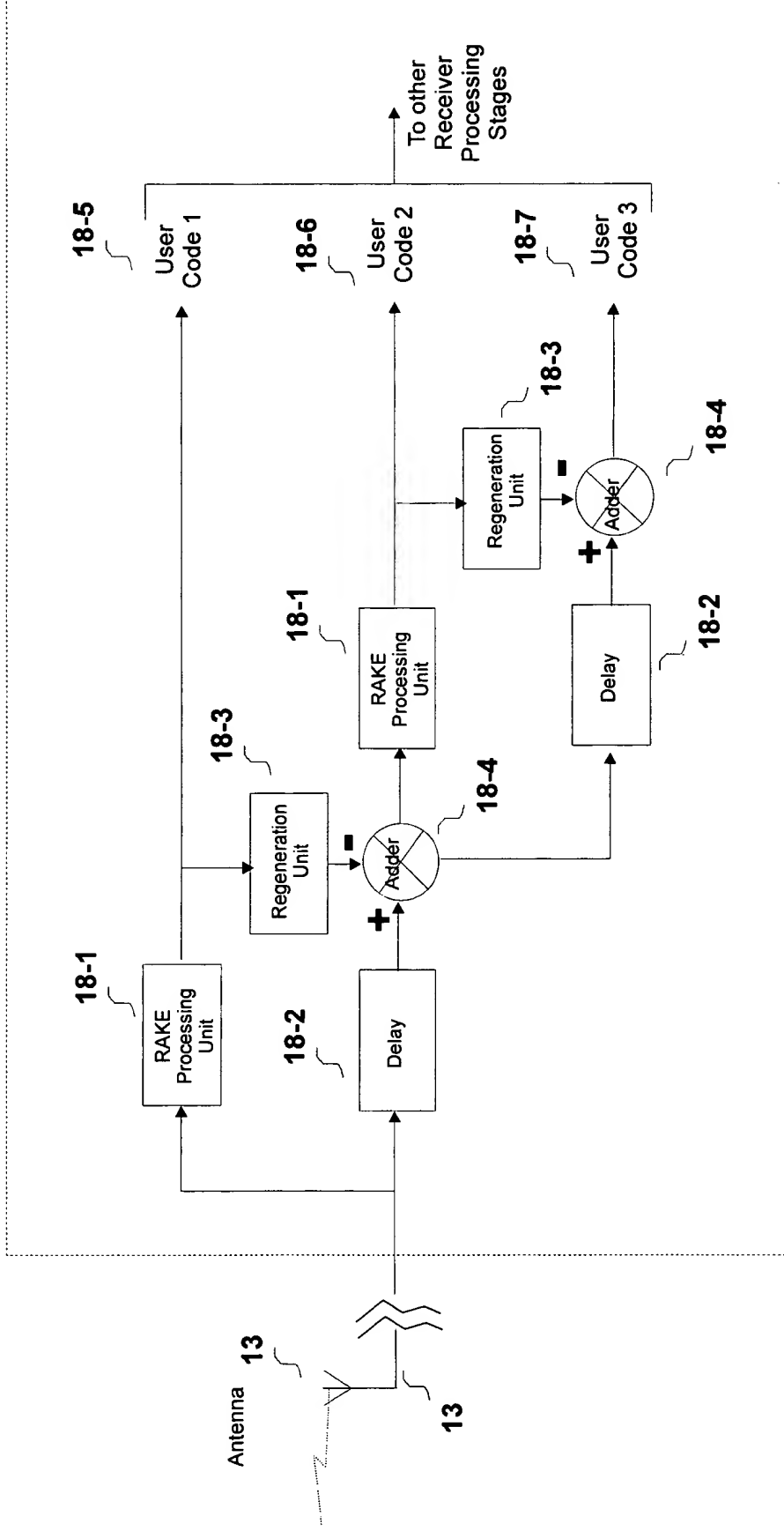


Figure 18 - Successive Interference Cancellation